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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,895	02/04/2004	Amit Dagan	42P10813C	5362

7590 03/07/2007
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EXAMINER

NAMAZI, MEHDI

ART UNIT	PAPER NUMBER
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2189

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/772,895

Applicant(s)

DAGAN ET AL.

Examiner

Mehdi Namazi

Art Unit

2189

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed on 12/04/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,6,8-10,12-14 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,8-10,12-14,17 and 18 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/04/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to amendment filed December 12, 2006.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on December 4, 2006 is being considered by the examiner.

Drawings

The drawings were received on January 04, 2007. These drawings are approved.

Terminal Disclaimer

The terminal disclaimers filed on December 4, 2006 disclaiming the terminal portion of any patent granted on this application, which would extend beyond the expiration date of patent number 6,760,822 have been reviewed and are accepted. The terminal disclaimers have been recorded.

Response to Arguments

Applicant's arguments with respect to claims 1-3, 5, 6, 8-10 and 17-19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 6, 9, 10, 13, 14, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA, and further in view of Digital communications.

As per claims 1, 6, 9, 13, AAPA teaches a computerized method comprising: identifying a first stream of data stored in first source register within a processor (page 10, lines 13-15, and 16-17, R1) and a second stream of data stored in a second source register within the processor (page 10, lines 13-15, and 16-17, R2) and R6 stores the resulting stream of interleaved bits (page 10, lines 19-20, and fig. 5).

As per claims 1, 6, 9, 13, and 18 AAPA teaches the claimed invention but fails to teach performing on the processor a bit-level interleaving of the first stream of data and the second stream of data to generate a combined stream of data in a destination register within the processor.

Digital Communications teaches interleaving the encoded data, wherein the original coded words (fig. 6.23-a, wherein the original coded words A, B, C, D, are consider as streams) are bit-interleaved (fig. 23-b, wherein interleaved word 1 is a combination of A, B, C,streams and A1 from A, B1 from B, and so on are interleaved).

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Therefore, it would have been obvious to one having ordinary skill in the art to modify the work of AAPA because Digital communication teaches interleaving the coded message before transmission which causes bursts of channel errors to be spread out in time (page 358, 2nd paragraph).

As per claims 2, and 14, AAPA teaches receiving the interleaving instruction (page 10, line 19).

As per claim 10 AAPA teaches the combined stream of data is stored in a destination register (page 10, line 19, R6).

Claims 5, 8, 12, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA, and Digital communication, and further in view of Romano et al. (US. 5,586,306).

As per claims 5, 8, 12, and 17, AAPA, and Digital communication teaches the claimed invention but fails to teach each of the first stream and second stream includes 16 bits of encoded data.

Romano teaches a 16 bits shift register (col. 21, lines 1-3).

Therefore, it would have been obvious to one having ordinary skill in the art to modify the work of AAPA, and Digital communication because Romano teaches a 16-bit shift register in order to capture incoming data stream for detecting the encoded transition.

Allowable Subject Matter

Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehdi Namazi whose telephone number is 571-272-4209. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reginald Bragdon can be reached on 571-272-4204. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

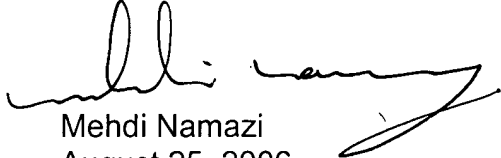
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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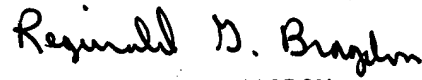
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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Mehdi Namazi
August 25, 2006



REGINALD BRAGDON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100